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**JOHN CANTRELL and GILLIAN COOKSON (eds.), Henry Maudslay and the Pioneers of the Machine Age.** Stroud and Charleston: Tempus, 2002. Pp. 192. ISBN 0-7524-2766-0. £16.99, $26.99 (paperback).

As the editors note in the introductory chapter, this book began with the idea of exploring the network of Manchester engineers who were working at the time of Joseph Whitworth, James Nasmyth and Richard Roberts, namely during the first half of the nineteenth century. They discovered, however, that Henry Maudslay in London was a significant influence on these workers and on the development of machine tool technology in general. Thus the project was redirected. The eight contributors to this volume paint an intriguing portrait of Maudslay, the environment of the London engineering industry during his career, and the wider context of a pioneering generation of innovative British engineers. In the process, they provide a form of industrial career history that transcends previous technical histories that focused merely on nuts and bolts. The Introduction describes the authors' approach as "using the wider lens of biography to explore the technological, business and personal progress of the men who made the machines" (p. 16). Moreover, they extricate their stories from the ambivalent, if not malign, historiographical influence of Samuel Smiles, whom the editors characterise as a "caricaturist… interested in stories of 'triumph over adversity', of single-mindedness, dedication and the rise from humble origins" (p. 12). While Smiles preserved important raw material, he marginalised some engineers (such as David Napier and William Muir) while vaunting the careers of others (e.g. Maudslay, Nasmyth, Roberts, Whitworth and Joseph Clement). Each of these engineers receives a chapter in this book Bracketing these biographical contributions are a chapter that surveys London engineering at the time of Maudslay, and another that discusses the activities of his company to the end of the nineteenth century.

The ten chapters are rather well matched, adopting a perspective and level of detail that are largely consistent. Nearly one hundred illustrations – ranging from crisp and detailed to muddy and blurred – depict drawings, engravings and photographs of machines and individuals, and a handful of others showing maps, factories and advertisements. Their captions are generally terse, and so restrict the analytical value of the images. The index is equally sparse, with some two hundred entries limited mainly to the names of individuals and their machines. The index provides no link to the context of business (apart from company and process names) or the wider perspectives of engineering, society and culture. This is unfortunate, because the individual contributions do touch, to varying degrees, upon these aspects of the story. In portraying the interweaving of the career histories of a handful of influential engineers, the book communicates a strong sense of the local pressures and opportunities influencing them, and their ingenuity in conceiving technical solutions.

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On the other hand, the chapters do not depict a rich economic or cultural history of technology or technologists. This is perhaps inevitable given the format of the book, which focuses on the biographies of individual early innovators. The tracing of their interconnections and common environments is a distinct improvement over the Smilesian style and its moralistic undercurrents, even if the engineers' backgrounds were too dissimilar to allow a very extensive analysis in the form of prosopography. As with the chapters themselves, the five-page bibliography, focusing on earlier biographies and technical histories, tends not to engage with the more analytical works on the history, sociology, philosophy and culture of technology that have become popular in recent scholarship.

The book therefore succeeds in its stated aims. By juxtaposing parallel and well-matched biographies, it enables the reader to draw insights about the similarities and differences of the individuals and their working environments. And by rehabilitating engineers such as Napier and Muir while providing nuanced portraits of other key figures, the collection counteracts the still-prevailing histories of nineteenth century engineering. But these contributions could have gone further, illuminating not only the mechanical engineering that evolved in Georgian London, but its significance for wider studies of technology.

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